

Life - line

User Manual



Sometime in the spring of 1992 I arrived in Warsaw. I checked in the Forum hotel in the room of 20th floor and was about seeing my friend. Prior called lift rang I looked down through window and my new was parked there. Within a while I was down - and the car already wasn't there. Who has not experienced that will never understand the strength helplessness feeling as I speak. I ran to the intersection, what I see it still there. Just Imagine, It wasn't there. So hurry to the Police! But where? No, first I have to call home to ask for it's license plate number.

From autumn 1992 I sell car security.

Described feeling of helplessness caused by loss of car experiences year to year about 20.000 car owners. Return ratio is between 5 and 15%, including few hundreds cars saved by GPS security systems.

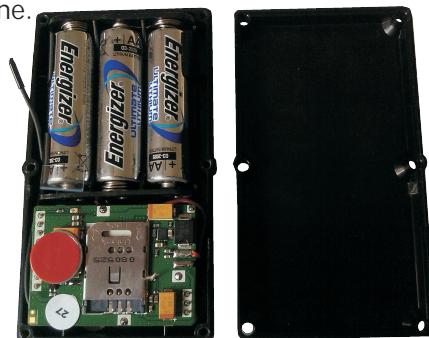
Its usage density is still very low, its reliability isn't bullet proof and it's price is accepted only by responsible and/or experienced. All the others believe it can't happen to them and if so - it was destiny.

Many people says they are perfectly insured. But I still haven't met a robbed guy fully satisfied with payment of premium.

Car thefts make a huge business that asks for your sponsorship. If you think to reduce the risk of your sponsorship, Life-line is the easiest and cheapest way to recover your temporary lost property.

Congratulations! You discovered the Life-line.

Jan Buzek



APPLICATION

The self powered device Life-line was designed for cyclic transmitting it's coordinates and status data.

Way of use:

- do it by yourselves
- controlled by webserver (+security service) which a possibility to check by yourselves

HOW DOES IT WORK?

The plastic body covers a GSM modem, GPS receiver, microprocessor and battery. Prior operation GSM operator's SIM card must be inserted.

The device should be covertly installed, so it was not possible to find and remove.

Device operates in three modes: Small Check, Big Check and Search

In "Big Check" mode the device transmitts its position once a day. It turns GPS receiver on, calculates coordinates, turns GPS OFF and phone ON, registers in GSM network and transmitts SMS. It waits 5 minutes for possible SMS with a command or setting and then it falls in Stand By mode. Cosequently the device works only 10 minutes per day in order to minimize battery consumption and to prevent its detection effected by any desirable device.

Code	Date of SMS transmitt
09:12:23	date of GSM calculation *
N55°01"56.82"	latitude *
E55°01"56.82"	longitude *
Sat = 05	number of satellites received *
Period=1440 min	working interval
Vbat=4.4V	battery voltage
Time=1min	time needed to get coordinates
SMS=xxx	total number of SMS sent
Ver 000000	SW version
ID 00000	unid ID
01.06.10	date of production
T=20	temperature around
db=-57	strength of GSM signal
0km/h	speed
0.00	direction
MCC=XXX	GSM operator's country
MNC=XX	GSM operator's code
LAC=XXXX	BTS group code
CID=XXXX	BTS code
01.01.2010	date

* Marked parameters depend on GPS reception.
If GPS isn't available the files are scratched.

The device can also send a Google Map internet link, for example:

<http://maps.google.com/maps?=&q=50.07967+14.42975>

For switching the message into „Google“ mode please reffer to table XX. Remember, the „Google SMS“ contains just the link and no other operational data.



SMALL CHECK

In normal operation the device sends it's message once a week. But it registers to GSM network every day to check for possible SMS command. The user can send SMS with a position request and the device will respond within 5 minutes once it wakes up. The same procedure with a propriate command will initiate the "Tracking Mode".

TRACKING MODE:

Sending the command 666 you initiate the TRACKING MODE. In this mode the device sends it's possision every 20 minutes. For highest precision the possision is calculated 10 minutes and its sent to the same phone that requested the tracking mode.

USER COMMANDS

The customer can benefit off customer commands. The command consist off communication PIN and the command itself.

To turn Tracking Mode ON send command XXXX666, where XXXX is PIN code, for example 12345666

To turn Tracking mode OFF send command XXXX999, where XXXX is PIN code, for example 12345666

USER COMMANDS	
XXXX666	Tracking mode on
XXXX999	Tracking mode off
XXXX300	Position request
XXXX500	Google map link request

* XXXX is PIN code

The command can be sent from any phone.

Life-line, will answer to inquirer.

SETTINGS

Working parameter settings:

1. Check (wake up) frequency
2. Google link / coordinates reception
3. SMS frequency in Big Check mode
4. SMS frequency in Tracking mode
5. Automatic credit check trashhold
6. Communication PIN code
7. Master phone number

	Command	Description
1.	XXXX*T1#NNN	<p>Initial frequency of registration in GSM network and SMS positioning. Factory setting is 24h, variability from 1 hour till 45 days. Frequency NNN is given in minutes (60 to 64800). <code>For example, to get the frequency 2 times a day please set 12=720min=>1234*T1#720*</code></p>
2.	XXXX*GPS300*	<p>Position is requested to be delivered in web link. Applies to both modes - Check as well as Tracking.</p>
3.	XXXX*GPS300*	<p>Position is requested to be delivered in SMS. Applies to both modes.</p>
4.	XXXX*N#MM*	<p>Turn the Big Check mode ON! The Big Check mode is actually the same Small Check mode with N number of position transmission skip. N can be set from 0 to 250, so unit can send its position every time or up to every 250th time. <code>If positioning is requested once a week, then skip N=6 on condition that function 1 is set to 24 hours and command will be 1234*N#6*. Once we request unit to wake up every 8 hours and message should be sent once in 2 weeks then command will be 1234*T1#480*N#42*.</code></p>
5.	XXXX*N#MM*	<p>Frequency of registration in GSM network and SMS positioning in TRACKING mode. Factory setting 20 minutes can be changed from 15 minutes to 24 hours. Frequency NNN is given in minutes (15 to 1440). <code>Example, to get the position twice an hour programm the unit: 1234*T4#30.</code></p>
6.	XXXX*58#KKK*	<p>The credit threshold KKKK us a sum in ntl currency - up to 10 symbols. <code>To set threshold 5 € send SMS: XXXX*58#5</code> <code>Warning! This costs you an additional SMS each time!</code></p>
7.	XXXX*59#KKKK*	<p>The command to check an actual GSM credit status - typically *22#. <code>If credit of your prepaid SIM is checked with *102# then send: 1234*59#*22#*.</code></p>
8.	XXXX*39#NNNN*	<p>If 4321 should be your new communication PIN then request the change into 4321 with: <code>1234*39#4321*.</code></p>

9.	XXXX*35#420KKK KKKKKK*	To change the master number where regular Big Check messages should be received. If your new phone is +420 602 112 233 programm it with SMS: 1234*35#420602112233 .
10.	XXXX*40*	Send the Life-line status SMS
11.	XXXX*T3#NN	Time to stay logged in GSM network. Factory setting 5 minutes can be changed from 3 to 30 minutes. Consider prolonging factory set 5 minutes - will have a negative effect on battery life time.

Every setting SMS will be replied with report setting message with a following structure:

SMS	Meaning
T1=1440	Indicates frequency of GSM log-in and SMS send in DAILY mode (min).
T2=5	Max time of stay logged in GSM in Small Check mode, in minutes.
T3=5	Time of stay logged in GSM, in minutes.
T4=20	Frequency of logging in GSM and sending SMS in TRACKING mode, in minutes
GPS500/ GPS300	GPS500 - sends detailed SMS status info, in both modes GPS300 - sends SMS with web map link, in both modes
Track OFF	Track Off - Tracking mode is Off Track On - Tracking mode is On
Vbat=4.24V 98%	Voltage and approximate status of battery
SMS=XXX	Number of SMS sent, total
Ver 000000	Firmware ID
ID 00000	Unit ID
01.06.10	Production date
T=20	Temperature of the unit
db=-57	Strength of GSM signal (-113=minimal, -51=maximal)
59*100#	Format of credit request command
58 50	Threshold of automatic credit check

Inserting the SIM card

Prior inserting the SIM card please remove its security PIN 1. Using the same SIM send any SMS to other phone and to check that your SIM card is ready to send messages.

Remove all preset numbers from the address book of the SIM.
(Dial 1# and the phones display shouldn't show anything).

In SIM contacts (not your phone contacts!!!) insert the only record this way:

- in NAME field write your communication PIN.

PIN must consist of 4 digits.

- in PHONE NUMBER field insert your complete phone number without „+”,

for example: 420602112233

Your SIM is ready to be inserted in the unit now.

WARNING: Any manipulation with SIM is allowed
must happen only with disconnected batteries!!



TURNING the unit on:

Insert the batteries with correct polarity!

If batteries are already inserted by producer, just remove the isolation tape.

The LED on the IC board will start flashing.

Dual flashing indicates position calculation. It takes 1-2 minutes in ideal reception conditions. In worse it can take up to 5 minutes. Getting GPS LED lights longer.

Triple flashing indicates sending SMS.

Finally, 4 flashes indicates the 5 minutes mode waiting for the SMS command .

!Didn't receive any message from your Life-line? Check whether communication PIN and your phone number was correctly recorded into Life-line SIM. Also inserting the number using some other phone can help.

LED flashes interpretation:

# of flashes	mode
2	Getting GPS
3	Registering to GSM, sending SMS
4	Expecting SMS command or request
5	TRACKING mode
doesn't flash	Unit is turned off until next working cycle comes

If you received SMS correctly the unit is ready to be fixed on the.

INSTALATION

The unit can be fixed and used on:

- vehicles, motorcycles, snow mobile, quadricycle, vessel
- building machnery - tractors, cranes, excavators, trucks, containers (outside)
- wagons, loads, semitrailors

The unit is dust - and - watherproof.

To make it buletproof you can tighten plastic shells with a slimlevel of silicon.

For ideal function the unit must be installed well hidden. It's orientation isn't critical, simply select a good place. There are many suitable place in your car, such as it's wing, suitable place under the carpet of the trunk, in doors, under roof upholstery, into the seat, into bumper or even under the hood (tighted).

IMPORTANT NOTE

An important note regarding batteries and SIM card:

Your Life-line has been already equipped with a pre-paid SIM card in order to test it fully and to sell it ready to use.

The SIM credit is 5€ and you received all necessary data to become the user of the SIM. From now the responsible for its traffic and for actual remaining credit IS YOU! We recommend you to check the credit status often or even better: to change the service plan from "prepaid" into "contract".

Programming the frequency of Big Check please remember that its data volume requires 2 SMSs that must be paid. Also remember, that Credit Check needs other additional SMS. Remember, that SMS transmitted from roaming will cost more and sometimes simple approaching border area can log you into foreign GSM operator!

Remember that the credit of prepaid card must be regularly (1 year) recharged to keep SIM alive even if remaining credit is OK.

Batteries Energizer Ultimate Lithium are the only recommended batteries for Life-line for its longevity, thermal amplitude resistance and low self-discharge. The battery voltage status is shown in every message.

Remember to check batteries once its voltage reaches 3,4 V.



Dispatch service and web support

All Life-lines sold through ALTEA dealers network are ready for Website support.

All Life-lines that are sold with SIMs are pre-registered for ALTEA Website and ALTEA server number is already stored in SIMs memory.

There are 3 benefits of website support:

Firstly - setting your Life-line from website is much easier (and free) from web then from your phone. Setting confirmation responses are stored in the web application.

Secondly - All your Big Checks are stored and available to you any time, in easy understandable form. No need to erase old messages from your phone.

and finally - there is a 24/7/365 dispatch center behind the website. Once your car got lost, just send the Tracking command from website instead sending it from your mobile and the data are available for operator that will help you and Police in finding your car.

Your registration to web is required. Once registered you get a year of website use for free. You will be offered to prolong following period for very reasonable price.

The dispatch center assistance in emergency is free for one time per year.

Visit www.altea.cz/life-line!

Technical data, package content

- Life-line unit
- Prepaid SIM card with a credit min 5Å (inserted) with original documents
- 3 battered Energizer Ultimate Lithium
- user manual

dimension, mm	- 103x59x21
temperature range -	- 30 to +85
used batteries	- AA 1,5 V
qualified working period in factory mode	- 3 years